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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,354	09/27/2001	Rumo Satake	07977/285001/US5238	3893
26171 7590 05/02/2007 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER DHARIA, PRABODH M	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 05/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/966,354

Applicant(s)

SATAKE, RUMO

Examiner

Prabodh M. Dharja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,5,11-14,17 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,6-10,16,19-23 and 25-29 is/are allowed.
- 6) ☒ Claim(s) 2,5,11-14,17 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. **Status:** Please all the replies and correspondence should be addressed to Examiner's new art unit 2629. This office action is per advisory office action of 07-12-2006. Claims 1-14, 16,17, 19-29 are pending in this action. Claims 15 and 18 are cancelled.

Drawings

3. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2,5 and 24 are rejected under 35 U.S.C. 102(e) as being anticiated by Ozawa; Tokuro (US 6,424, 331 B1).

Regarding Claim 2, Ozawa; Tokuro teaches method of driving a liquid crystal display device (Col. 1, Lines 16-31) comprising a step of simultaneously applying a common signal voltage to a plurality of pixel electrodes of a plurality of pixels connected to a signal line (Col. 1, Lines 16-37), thereby displaying a common gray-scale among the plurality of pixels connected to the signal line (Col. 1, lines 16-40, Col. 18, Lines 43-62, Col. 22, Lines 51-62).

Regarding Claim 5, Ozawa; Tokuro teaches a first light emission color, a second light emission color, and a third light emission color are intermittently incident upon the liquid crystal display device (Col. 1, lines 16-40, Col. 18, Lines 43-62, Col. 22, Lines 51-62, Col. 11, Lines 41-44, Col. 33, Lines 20-39).

Regarding Claim 24, Tokuro teaches the liquid crystal display device is driven in a field sequential system (Col. 12, Line 41 to Col. 13, Line 36).

6. Claims 11-14 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki; Suguru (US 6522319 B1).

Regarding Claim 11, Yamzaki teaches a liquid crystal display device (Col. 1, Lines 14 and 15), comprising: a plurality of pixels; a plurality of pixel electrodes included in the pixels respectively (Col. 2, Lines 1-9); a first means for detecting pixels which are connected to one signal line (Col. 23, Lines 62-66 teaches the driving circuitry determines the non- display and displaying pixels which is same as detecting of connected pixels) and which are to be applied with a common signal voltage for displaying a common gray-scale among the pixels (Col. 23, Lines 49-65 teaches off pixels are supplied off voltage and on pixels are applied on voltage Col. 23, Lines 28-33 common contrast or grayscale is maintained, Col. 29, Lines 54-60, Col. 34, Lines 20-29); and a second means for simultaneously applying the common signal voltage to pixel electrodes of the detected pixels (Col. 23, Lines 49-65 the on pixels are applied on voltages and off pixels are applied off voltages Col. 21, Lines 65-67 teaches driving simultaneously).

Regarding Claim 12, Yamazaki teaches the second means includes a means for selecting a signal line connected to the detected pixels, and a means for selecting a scanning line connected to one of the detected pixels (please see figures 11-15, and 51, Col. 14, Line 51 to Col. 15, Line 14, Col. 30, Lines 4-40, the scanning and signal line driver has decoders to select detected or displaying pixels).

Regarding Claim 13, Yamazaki teaches the means for selecting a signal line has an address decoder (please see figures 11-15, and 51, Col. 14, Line 51 to Col. 15, Line 14, Col. 30, Lines 4-40, the scanning and signal line driver has decoders to select detected or displaying pixels).

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Further Regarding Claim 14, Yamazaki teaches the means for selecting a scanning line has an address decoder (please see figures 11-15, and 51, Col. 14, Line 51 to Col. 15, Line 14, Col. 30, Lines 4-40, the scanning and signal line driver has decoders to select detected or displaying pixels).

Further Regarding Claim 17, Yamazaki teaches a light source of a first light emission color, a light source of a second light emission color, and a light source of a third light emission color (Col. 34, Lines 14-19, Col. 16, Lines 8-13, Col. 29, Lines 54-60, Col. 34, Lines 20-29).

Allowable Subject Matter

7. Claims 1,3,4,6-10,16,19-23 and 25-29 are allowed.

8. The following is an examiner's statement of reasons for allowance:

The cited prior art has failed to teach applicant's claimed invention, in which, "a response time of liquid crystal when a voltage value is changed from the first signal voltage to the second signal voltage is calculated, and in an order from a pixel in which the calculated response time of liquid crystal is long, the potential of the second signal voltage is applied to the pixel electrode of the pixel in the second sub-frame period"; "applying a potential of a first signal voltage to the first and second pixel electrode and applying a potential of a second signal voltage to the second pixel electrode, wherein a difference between an absolute value of the first signal voltage and the second signal voltage is larger than 0 volt and smaller than 0.5 volt"; and deciding an order of applying the second signal voltages to the plurality of pixel electrodes in accordance with a

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voltage difference between the first and second signal voltages of the corresponding pixel electrodes”.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Response to Arguments

9. Applicant's arguments, see remark, filed 07-12-2006, with respect to the rejection(s) of claim(s) 2,5,11-14,17 and 24 under section 112 first paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ozawa; Tokuro (US 6,424, 331 B1) and Yamazaki; Suguru (US 6,522,319 B1).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuribayashi; Masaki et al. (US 5,615,027 A) Liquid crystal apparatus and display system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668. The examiner can normally be reached on M-F 8AM to 5PM.

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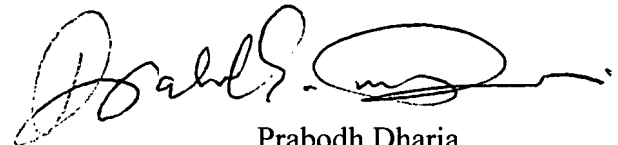
12. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

A handwritten signature in black ink, appearing to read 'Prabodh Dharia', with a stylized flourish at the end.

Prabodh Dharia

Partial Signatory Authority Program

AU 2629

August 9, 2006